

WHAT IS CLAIMED IS:

1. An output management method for an information processing apparatus, which can communicate with a first output apparatus having a copying function of printing based on a scanned document image, and a second output apparatus having a print function of printing image data transmitted from an external device in a predetermined format, and comprises a server function of managing output jobs in the first and second output apparatuses, comprising:
  - a first acquisition step of acquiring first output job information of a copy job to be executed by the first output apparatus;
  - a detection step of detecting occurrence of any obstacle that disturbs execution of a job during execution of an output job; and
  - a substitution output step of controlling the second output apparatus to execute a substitution print process based on the first output job information upon detection of occurrence of the obstacle during execution of the output job in the first output apparatus in the detection step.
2. The method according to claim 1, wherein the detection step includes a step of monitoring occurrence of an obstacle by monitoring based on the first output job information, and said method further comprises a notification step of notifying an external client

computer of a monitoring result based on monitoring in the detection step.

3. The method according to claim 1, further comprising an update step of reflecting the first  
5 output job information onto a second job output queue of the second output apparatus, and wherein the substitution output step includes a step of transmitting a job on the basis of the second job output queue updated in the update step.

10 4. The method according to claim 3, wherein the first output job information contains first order information, and the update step includes a step of updating the second job output queue on the basis of the first order information, and second order  
15 information of a job in the second output apparatus.

5. The method according to claim 3, further comprising a suppression step of suppressing registration of the copy job acquired in the first acquisition step in a job output queue on the basis of  
20 the first output job information, and wherein the update step includes a step of executing a registration process of the copy job to the second job output queue based on the first output job information in the detection step.

25 6. The method according to claim 1, wherein the first output job information contains management

information used to manage the output job and/or image data to be output.

7. The method according to claim 1, wherein the substitution output step includes a conversion step of  
5 converting a format of image data based on the first output job information into a format that the second output apparatus can process.

8. The method according to claim 1, further comprising a substitution determination step of  
10 determining in accordance with setup information set by a user in advance whether or not a substitution process is to be executed for each output job type.

9. The method according to claim 8, wherein the setup information contains information of an obstacle  
15 that may occur for each output job type, and execution/non-execution of a substitution process upon occurrence of that obstacle.

10. An output management method for an information processing apparatus, which can communicate with a  
20 first output apparatus having a copying function of printing based on a scanned document image, and a second output apparatus having a print function of printing image data transmitted from an external device in a predetermined format, comprising:

25 a detection step of detecting an obstacle of a copy job to be executed by the first output apparatus;  
and

a substitution process step of executing the copy job in the first output apparatus as a print job in the second output apparatus upon detection of the obstacle in the detection step.

- 5 11. An information processing apparatus, which can communicate with a first output apparatus having a copying function of printing based on a scanned document image, and a second output apparatus having a print function of printing image data transmitted from  
10 an external device in a predetermined format, and comprises a server function of managing output jobs in the first and second output apparatuses, comprising:

first acquisition means for acquiring first output job information of a copy job to be executed by  
15 the first output apparatus;

detection means for detecting occurrence of any obstacle that disturbs execution of a job during execution of an output job; and

substitution output means for controlling the  
20 second output apparatus to execute a substitution print process based on the first output job information upon detection of occurrence of the obstacle during execution of the output job in the first output apparatus by said detection means.

- 25 12. The apparatus according to claim 11, wherein said detection means monitors occurrence of an obstacle by monitoring based on the first output job information,

and said apparatus further comprises notification means for notifying an external client computer of a monitoring result based on monitoring of said detection means.

5 13. The apparatus according to claim 11, further comprising update means for reflecting the first output job information onto a second job output queue of the second output apparatus, and wherein the substitution output means transmits a job on the basis of the second  
10 job output queue updated by said update means.

14. The apparatus according to claim 13, wherein the first output job information contains first order information, and said update means updates the second job output queue on the basis of the first order  
15 information, and second order information of a job in the second output apparatus.

15. The apparatus according to claim 13, further comprising suppression means for suppressing registration of the copy job acquired by said first  
20 acquisition means in a job output queue on the basis of the first output job information, and wherein said update means executes a registration process of the copy job to the second job output queue based on the first output job information by said detection means.

25 16. The apparatus according to claim 11, wherein the first output job information contains management

information used to manage the output job and/or image data to be output.

17. The apparatus according to claim 11, wherein said substitution output means converts a format of image data based on the first output job information into a format that the second output apparatus can process.

18. The apparatus according to claim 11, further comprising determination means for determining in accordance with setup information set by a user in advance whether or not a substitution process is to be executed for each output job type, and wherein the substitution process of said substitution output means is executed based on a determination result of said determination means.

19. The apparatus according to claim 18, wherein the setup information contains information of an obstacle that may occur for each output job type, and execution/non-execution of a substitution process upon occurrence of that obstacle.

20. An information processing apparatus, which can communicate with a first output apparatus having a copying function of printing based on a scanned document image, and a second output apparatus having a print function of printing image data transmitted from an external device in a predetermined format, comprising:

detection means for detecting an obstacle of a copy job to be executed by the first output apparatus; and

substitution process means for executing the copy  
5 job in the first output apparatus as a print job in the second output apparatus upon detection of the obstacle by said detection means.

21. A computer program which comprises program codes for making an information processing apparatus, which  
10 can communicate with a first output apparatus having a copying function of printing based on a scanned document image, and a second output apparatus having a print function of printing image data transmitted from an external device in a predetermined format, and  
15 comprises a server function of managing output jobs in the first and second output apparatuses, execute:

a first acquisition step of acquiring first output job information of a copy job to be executed by the first output apparatus;

20 a detection step of detecting occurrence of any obstacle that disturbs execution of a job during execution of an output job; and

a substitution output step of controlling the second output apparatus to execute a substitution print  
25 process based on the first output job information upon detection of occurrence of the obstacle during

execution of the output job in the first output apparatus in the detection step.

22. A computer program which comprises program codes for making an information processing apparatus, which  
5 can communicate with a first output apparatus having a copying function of printing based on a scanned document image, and a second output apparatus having a print function of printing image data transmitted from an external device in a predetermined format, execute:  
10 a detection step of detecting an obstacle of a copy job to be executed by the first output apparatus; and  
a substitution process step of executing the copy job in the first output apparatus as a print job in the  
15 second output apparatus upon detection of the obstacle in the detection step.
23. A storage medium storing a computer program which comprises program codes for making an information processing apparatus, which can communicate with a  
20 first output apparatus having a copying function of printing based on a scanned document image, and a second output apparatus having a print function of printing image data transmitted from an external device in a predetermined format, and comprises a server  
25 function of managing output jobs in the first and second output apparatuses, execute:



a first acquisition step of acquiring first output job information of a copy job to be executed by the first output apparatus;

a detection step of detecting occurrence of any  
5 obstacle that disturbs execution of a job during execution of an output job; and

a substitution output step of controlling the second output apparatus to execute a substitution print process based on the first output job information upon  
10 detection of occurrence of the obstacle during execution of the output job in the first output apparatus in the detection step.

24. A storage medium storing a computer program which comprises program codes for making an information  
15 processing apparatus, which can communicate with a first output apparatus having a copying function of printing based on a scanned document image, and a second output apparatus having a print function of printing image data transmitted from an external device  
20 in a predetermined format, execute:

a detection step of detecting an obstacle of a copy job to be executed by the first output apparatus; and

a substitution process step of executing the copy  
25 job in the first output apparatus as a print job in the second output apparatus upon detection of the obstacle in the detection step.